Buchbesprechungen

11. Smiley, R. L.: The predatory mite family Cunaxidae (Acari) of the world with a new classification. - Indira Publishing House, East Bloomfield, Michigan 1992, 356 pp., 184 figs.

The family Cunaxidae was erected by Thor (1902) for cosmopolitan mites having four palpal segments previously placed in Bdellidae. They are fast running, red or brown mites which are predaceous on small arthropods (Collembola) and other mites occuring as agricultural crop pests. The monography includes a new family classification with 9 subfamilies. It presents the description and illustration of 166 species of which 39 species are newly assigned to the family. Among 17 genera 3 are newly erected and 3 synonymized. Detailed diagnoses of and keys to species, genera and subfamilies as well as host and distribution data characterize the author's unresting effort to tidy up a discomposed group of mites worth to be dealt with. Smiley is an employee of the Systematik Entomology Laboratory within the Agricultural Research Service of the US. He compares the estimated benefit of the predatory Cunaxids for Agriculture with that of the phytoseiid mite *Typhlodromus occidentalis*, applied for integrated pest management on apples in Washington State: the mite has reduced the amount spent on pesticides over the past 14 years for a total of \$ 70 Mio. E. Popp

12. Gorham R. J. (Editor): Insect and Mite Pests in Food. An illustrated key - US Dept. of Agriculture. Agriculture Handbook No. 655, 1991. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Vol.1, 310 pp., vol.2, 457 pp., illus.

The publication is a comprehensive treatise on the occurrence and identification of food-contaminating arthropods which provides those who combat pests guaranteeing the purity of foods an accurat and convenient identifying of 650 species. No manual of this kind has ever been published before in United States, although a few similar works appeared in England and Canada. In addition to the more numerous and better known beetles, moth and flies, the poorly known mites, thrips and scale insects are included. The emphases placed on diagnostic keys and useful illustrations of both adult and immature stages are special features. A prime objective was to enable front-line non specialists to identify authoritatively a large number of evildoers superstructed on more than 200 years of basic systematic work. Volume 1 includes keys to the major arthropod pests of stored food, volume 2, also arranged phylogenetically, begins with a general key to arthropod classes and insects orders. All keys are illustrated by additional drawings associated with key couplets. The two volumes complement each other and permit the user to see simultaneously the couplet drawings (vol. 1) and the plate illustrations (vol. 2), hence the specific features and the general habitus. The geographic scope of this handbook is world-wide, since all the major cosmopolitan pests are included. Another option is to consult scientific literature; to do this a list of taxonomic aids is provided. Many people were involved in making this informative and useful reference possible.

13. Sonenshine D. E.: Biology of Ticks. Vol. 1, 1991 - Oxford University Press N.Y. 447 pp., figs. ISBN 0-19-505910-7.

Ticks represent the main field in acarology. None the less they are lacking a general, up-to-date text. This two volume book attempts to fill such a need; it has stressed the most recent studies and interpretations. Volume 1 concerns the systematics, life cycles, morphology, physiology and biochemical processes of ticks. Included are brief descriptions of the families and major genera and a dichotomous identification key. Additional chapters deal with tick cytogenetics, pheromonal regulation of mating, embryogeny, endocrine regulation of reproduction, development and water balance. This part constitutes the largest section and attests to the recent exponential increase in our knowledge of tick body organization and function. The author, via chemistry and origin of pheromones enabled to interpret topical results in ultrastructure and physiology plays at sight in his very own science. Volume 2 about ecology, tick-caused diseases and their control promises another highlight.

E. Popp

14. Skryabin K. I. (Editor): Key to Parasitic Nematodes. 4 Volumes. Translated and edited by M. Raveh - Brill Publishing Company, Leiden 1991. 3207 pp., figs. ISBN 90 04 09132 7 (set).

The CIS' helminthological literature is particularly rich in works describing various aspects of individual groups in the world of parasitic worms. But there is nowhere a published summarize of datas required for an accurate key for the entire class. Initiated in 1949 by the Laboratory of Helminthology, Academy of Sciences of the former USSR, a wide circle of specialists in the fields of biology, veterinary and medical sciences gives an extensive publication that enables to identify any nematode up to the level of genus which lives parasitically in any animal, any organ of the host and in any part of the world. Nearly 4500 species have been reported comprising 881 genera, 92 families and 10 suborders of the class nematoda living in 3600 different hosts thus far. Each Volumebook opens with general annotations about morphological and anatomical characteristics, phylogenetic and taxonomical problems and ends with a full bibliography subdivided in russian and nonrussian literature. Each volume is a complete and separate portrayal of a few suborders. But to determine single species there is only a list of names leaving undecided the most difficult task of a taxonomist.

E. Popp

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Spixiana, Zeitschrift für Zoologie

Jahr/Year: 1993

Band/Volume: 016

Autor(en)/Author(s): diverse

Artikel/Article: Buchbesprechungen 78